

FORM
2A

Rev
04/01

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400330359

Date Received:

10/25/2012

Oil and Gas Location Assessment

New Location

Amend Existing Location

Location#: 427157

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this Assessment will allow for the construction of the below specified location; however, it does not supersede any land use rules applied by the local land use authority. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

427157

Expiration Date:

12/17/2015

This location assessment is included as part of a permit application.

1. CONSULTATION

- This location is included in a Comprehensive Drilling Plan. CDP # _____
- This location is in a sensitive wildlife habitat area.
- This location is in a wildlife restricted surface occupancy area.
- This location includes a Rule 306.d.(1)A.ii. variance request.

2. Operator

Operator Number: 10392
 Name: TEKTON WINDSOR LLC
 Address: 640 PLAZA DRIVE #290
 City: HIGHLANDS RANCH State: CO Zip: 80129

3. Contact Information

Name: CLAYTON DOKE
 Phone: (970) 669-7411
 Fax: (970) 669-4077
 email: cdoke@petersonenergy.com

4. Location Identification:

Name: RANCHO WATER VALLEY PAD Number: 41-4
 County: WELD
 Quarter: NENE Section: 4 Township: 5N Range: 67W Meridian: 6 Ground Elevation: 4775

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 220 feet FNL, from North or South section line, and 255 feet FEL, from East or West section line.
 Latitude: 40.435480 Longitude: -104.888050 PDOP Reading: 2.9 Date of Measurement: 09/26/2012
 Instrument Operator's Name: WYATT HALL

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="13"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="20"/>	Water Tanks: <input type="text" value="8"/>	Separators: <input type="text" value="8"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text" value="13"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="8"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: _____

6. Construction:

Date planned to commence construction: 01/01/2013 Size of disturbed area during construction in acres: 4.00
Estimated date that interim reclamation will begin: 06/01/2013 Size of location after interim reclamation in acres: 2.00
Estimated post-construction ground elevation: 4775 Will a closed loop system be used for drilling fluids: Yes
Will salt sections be encountered during drilling: Yes No Is H2S anticipated? Yes No
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes No
Mud disposal: Offsite Onsite Method: Land Farming Land Spreading Disposal Facility
Other: _____

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 12/20/2011
Surface Owner: Fee State Federal Indian
Mineral Owner: Fee State Federal Indian
The surface owner is: the mineral owner committed to an oil and gas lease
 is the executer of the oil and gas lease the applicant
The right to construct the location is granted by: oil and gas lease Surface Use Agreement Right of Way
 applicant is owner
Surface damage assurance if no agreement is in place: \$2000 \$5000 Blanket Surety ID _____

8. Reclamation Financial Assurance:

Well Surety ID: 20110188 Gas Facility Surety ID: _____ Waste Mgnt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes No
Distance, in feet, to nearest building: 231, public road: 550, above ground utilit: 430
, railroad: 556, property line: 220

10. Current Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP
Non-Crop Land: Rangeland Timber Recreational Other (describe): Existing Drilling Pad
Subdivided: Industrial Commercial Residential

11. Future Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP
Non-Crop Land: Rangeland Timber Recreational Other (describe): Drilling Pad
Subdivided: Industrial Commercial Residential

12. Soils:

List all soil map units that occur within the proposed location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.gov/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: TASSEL FINE SANDY LOAM, 5 TO 20 PERCENT SLOPES.

NRCS Map Unit Name: KIM LOAM, 1 TO 3 PERCENT SLOPES.

NRCS Map Unit Name: _____

13. Plant Community:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes No

Plant species from: NRCS or, field observation Date of observation: _____

List individual species: Western wheatgrass, Needleandthread, Sideoats grama, Little bluestem, Threadleaf sedge, and other perennial grasses.

Check all plant communities that exist in the disturbed area.

- Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- Alpine (above timberline)
- Other (describe): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: No Yes Was a Rule 901.e. Sensitive Areas Determination performed: No Yes

Distance (in feet) to nearest surface water: 183, water well: 309, depth to ground water: 23

Is the location in a riparian area: No Yes Was an Army Corps of Engineers Section 404 permit filed No Yes

Is the location within a Rule 317B Surface Water Suppl Area buffer zone:

No 0-300 ft. zone 301-500 ft. zone 501-2640 ft. zone

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: No Yes

15. Comments:

Static water level determined from from permit #: 82024 -, in the SESE of Section 33 T6N R 67W, approximately 309' N-NW of the closest point to the location. This is the closest water well to location and has a reported depth to GW of 23' with no elevation reported; thus no changes have been made due to elevation differences. Location is listed as a sensitive area due to its proximity to surface and ground water. These wells are being permitted under the provisions of Rule 318A(I).c. (3); an existing location exception waiver is already on file with the state [Doc#: 400227152] along with an associated request [Doc#: 40027176] for this location, thus no additional waiver or request has been attached. Reference area is immediately adjacent to the location to the south, location pictures are therefore reference area pictures. This form 2a amends the existing Form 2a by adding three wellheads and their associated anticipated production equipment. Surface owner is a mineral owner in some of the wells from this pad, and is committed to a lease, thus these items have been marked as true on the form, but each associated well on teh pad may have different information. SUA is attached. Surface owner has waived Rule 305 notification requirements in §4 of the SUA.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 10/25/2012 Email: cdoke@petersonenergy.com

Print Name: CLAYTON DOKE Title: PETROLEUM ENGINEER

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 12/18/2012

**CONDITIONS OF
APPROVAL, IF ANY:**

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

--

Attachment Check List

Att Doc Num	Name
400330359	FORM 2A SUBMITTED
400330366	NRCS MAP UNIT DESC
400339148	MULTI-WELL PLAN
400339157	ACCESS ROAD MAP
400339158	LOCATION DRAWING
400339179	HYDROLOGY MAP
400339180	LOCATION PICTURES
400339181	SURFACE AGRMT/SURETY
400339185	WASTE MANAGEMENT PLAN
400339188	MULTI-WELL PLAN

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Complete.	12/13/2012 3:58:41 PM
OGLA	COGCC has reviewed the Town of Windsor comments as they pertain to the location. The location is located in Weld County and zoned for Agriculture, where the construction of oil and gas production facilities is a use by right.	11/8/2012 4:36:10 PM
LGD	If access to the site is proposed from SH 257, the operator shall contact CDOT for any access requirements.If access is proposed to a Town of Windsor street, the operator shall contact the Town of Windsor Engineering Department for access requirements.	11/5/2012 10:18:25 AM
LGD	Due to close proximity to residential neighborhoods, the applicant shall install a noise buffer to screen the initial drilling activities and installation of site improvements from surrounding neighborhoods.Additionally, activities that generate excessive noise shall be scheduled during daytime hours 8:00 a.m. to 5:00 p.m. to the maximum extent practicable.	10/31/2012 2:36:27 PM
LGD	Below please find the conditions of approval that are typically applied to conditional use grants for oil and gas operations located within Town.Therefore, the Town recommends the following conditions be placed on the abovementioned oil and gas facilities: 1.Prior to the commencement of drilling, the applicant shall submit comprehensive "Drilling and Site Improvement Plans" for review and approval by the Town.Such plans shall address initial drilling activities, initial installation of site improvements and details, and on-going perpetual maintenance of the subject site including, but not limited to, the following:	10/30/2012 8:01:11 AM

a. Site access plan. The Drilling and Site Improvement Plans and supplemental information shall address site access points and haul routes for review and approval.

b. Public street clean-up and tracking prevention. The Drilling and Site Improvement Plans and supplemental information shall include a tracking pad for review and approval.

c. Site grading. The Drilling and Site Improvement Plans and supplemental information shall address site grading, including any earth berms for emergency containment.

d. Site lighting. The Drilling and Site Improvement Plans and supplemental information shall include details regarding site lighting fixtures and locations. Security and other site lighting shall utilize full cutoff light fixtures to mitigate light pollution.

e. Temporary screening. The applicant shall install a buffer to screen the initial drilling activities and installation of site improvements from surrounding neighborhoods and streets. The temporary buffer shall include hay bales to enclose the drilling operations to provide noise mitigation.

f. Permanent screening. Given the close proximity to residential neighbors, the Drilling and Site Improvement Plans shall depict proposed long-term screening materials including landscaping, earth berms and any other screening methods to mitigate visual impacts.

g. Fencing. The Drilling and Site Improvement Plans shall depict fencing of the perimeter of the site. Fencing materials shall be reviewed for approval by the Town based upon the character of the surrounding neighborhood.

h. Oil and gas equipment.

(1) The applicant shall utilize electric motors in order to mitigate the noise impacts to the neighboring properties.

(2) The applicant shall ensure that the wells and tanks are of the minimum size required to satisfy present and future functional requirements to mitigate visual impacts.

(3) Low profile tanks shall be utilized and shall be installed in the least visible manner possible.

(4) All tanks and equipment shall be painted to blend-in with the surrounding landscape.

i. Air quality.

(1) The applicant shall participate in any required Environmental Protection Agency (EPA) air quality monitoring and/or testing by allowing EPA to install equipment on site for said monitoring and testing.

(2) The applicant shall install and operate an emissions control device (ECD) capable of reducing Volatile Organic Compound (VOC) emissions on the subject oil and gas equipment in accordance with Colorado Oil and Gas Conservation Commission (COGCC) and/or the Colorado Department of Public Health and Environment (CDPHE) rules and regulations.

(3) The applicant shall submit to the Town copies of all air emissions reporting as required by the COGCC and/or the CDPHE's Air Pollution Control Division.

j. Water quality.

(1) The applicant shall ensure that any hydrocarbon discharges from the site comply with all state and federal water quality requirements.

(2)The applicant shall participate in the Colorado Oil and Gas Association (COGA) Baseline Groundwater Quality Sampling Program utilizing independent third party sampling and laboratories and shall provide to the Town test results obtained before and after drilling operations.

k. Emergency containment. The secondary containment berm surrounding all storage vessels shall be designed and constructed to contain a minimum of 110% of the volume of the largest vessel located within the containment area or to State of Colorado standards, whichever requirements are more stringent.

l. Waste disposal. The applicant shall submit to the Town copies of all waste management reports as required by the COGCC and/or the CDPHE rules and regulations.

m. The following certification blocks shall be included on the Drilling and Site Improvement Plans:

(1) A signed owner's acknowledgement certification block.

(2) A signed drilling operator's acknowledgement certification block.

n. The following notes shall be included on the Drilling and Site Improvement Plans:

(1) The applicant shall comply with all rules and regulations of the Colorado Oil and Gas Conservation Commission (COGCC).

(2) The applicant shall comply with all rules and regulations of the Colorado Department of Public Health and Environment (CDPHE).

(3) The applicant shall maintain on-going compliance with all conditions of the Town and Windsor-Severance Fire Rescue.

(4) The facilities shall be kept clean and otherwise properly maintained at all times.

(5) The existing access may be utilized for oil and gas well activities. This access point is temporary and will be required to be removed at such time that permanent access is available in the future.

2. The applicant shall address and comply with the conditions of Windsor-Severance Fire Rescue.

Permit	Location is being amended to add 10 wells. All 10 form 2s are on hold for 30 day cert letter.	10/26/2012 9:46:50 AM
Permit	This form passed completeness.	10/25/2012 2:04:10 PM

Total: 7 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	Bradenhead Monitoring BMP: Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.
Drilling/Completion Operations	<p>Anti-Collision BMP: Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed wells. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to COGCC with the Form 5.</p> <p>Additionally, certian wells on this pad will have gyroscopic surveys run after they are drilled in order to pinpoint their location definitively, such that the risk of collision for subsequent wells is accounted for and assessed.</p>
Drilling/Completion Operations	<p>Noise Abatement BMP's: To the extent economically practicable and technically feasible, operator will minimize nuisance noise through the following measures:</p> <ol style="list-style-type: none"> 1. Schedule conspicuous noise producing activities to avoid the hours of 9:00 p.m. to 6:00 a.m. To the extent practicable the operator will avoid tripping pipe, moving heavy equipment, handling drill pipe or casing, and receiving deliveries during nighttime hours. 2. Attempt to conduct hydraulic fracturing operations during daylight hours (7:00 a.m. to 7:00 p.m.) 3. Construct a temporary buffer between the location and the home to the north to aid in attenuation of noise generated on the location during drilling and hydraulic fracturing.
Drilling/Completion Operations	<p>Lighting Abatement BMP's: Lighting abatement measures beyond the requirements of Rule 803. shall be implemented, including the following, at a minimum:</p> <ol style="list-style-type: none"> 1. Rig oriented to direct light away from nearby residents. 2. Install lighting shield devices on all of the more conspicuous lights 3. Rig shrouded to reduce light impacts to the home north of the proposed location.
Construction	ECD BMP: Emissions from condensate, crude oil, and produced water tanks and from glycol dehydrators shall be controlled with devices capable of achieving 95% efficiency destruction of volatile organic compounds (VOC). Operator shall comply with applicable Colorado Department of Health and Environment, Air Pollution Control Division permitting requirements.
Storm Water/Erosion Control	Stormwater Management BMP: This pad will be constructed such that no stormwater run-off will be allowed to migrate to the northwest into the streambed.

Total: 6 comment(s)